DETERMINANTS OF CHILDHOOD DIARRHOEA MANAGEMENT: A SOCIOECONOMIC PERSPECTIVE AMONG MOTHERS IN KWALI AREA COUNCIL, FCT, ABUJA, NIGERIA

BY

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Abstract

Child diarrhoea remains a leading cause of morbidity and mortality among children aged below five years, particularly in developing countries. The study was guided by the Health Belief Model, the study assessed diarrhoea prevalence and management practices among mothers within Kwali Area Council, Federal Capital Territory, Abuja, Nigeria. A descriptive cross-sectional survey research design was adopted using structured questionnaires administered to 395 mothers of under-five children using a multistage sampling technique. Data collected included socio-demographic characteristics, diarrhoea prevalence, and treatment of choice. Findings revealed high rates of diarrhoea, with oral rehydration solution (45.6%) being the most common intervention applied, followed by herbal medicine (24.3%), increased breastfeeding (17.7%), and self-medication (12.4%). Socio-economic factors, including level of education, income status, and access to health information, significantly influenced mothers' choices of treatment. Despite global awareness of best practices, gaps persist in routine ORS use and continued feeding during attacks. The study recommends the imperative of targeted health education, greater access to affordable care, and culturally tailored interventions to reduce reliance on untested treatments. The study conclude that breaking down socio-economic obstacles and enhancing mothers' health beliefs can strengthen diarrhoea control and reduce under-five morbidity and mortality within the Kwali Area Council.

Keywords: *Childhood diarrhea, Socio-economic determinant, and Mothers' management practices*

1.1 Introduction

Diarrheal disease during childhood continues to be among the main killers of children under five years old worldwide. In 2024, diarrheal disease was the third highest cause of death in this age category, at an estimated 443,832 deaths every year, along with nearly 1.7 billion episodes of diarrhoea annually World Health Organization (WHO, 2024). Despite both being preventable and treatable using interventions such as oral rehydration solution (ORS) and zinc supplementation the burden still remains unacceptably high globally. For instance, UNICEF and WHO estimates had put combined preventative and therapeutic measures at a position where up to two million deaths per year due to diarrhea and pneumonia could be prevented by 2025, via interventions such as clean water, sanitation, vaccines, ORS, and zinc supplementation (UNICEF &WHO, 2024).

Socio-economic determinants have profound effects on the incidence and treatment of diarrhoea in childhood within sub-Saharan Africa. Multi-level analysis across eleven countries in Africa revealed that caregivers' level of education, working status, and socio-economic status of the communities had significant effects on treatment-seeking behaviors like whether the mothers go to medical centers, pharmacies, or self-treatment at home. Also, a review study of research between 2013 and 2023 again proved that maternal education is a key determinant in reducing the prevalence of childhood diarrhoea because highly educated mothers have a higher opportunity of being able to understand and follow good hygiene practices, habits of sanitation, nutrition, and preventive care.

In Nigeria, diarrhoea among children is both burdensome and disproportionately high by region and socio-economic status. From the 2018 Nigeria Demographic and Health Survey analysis, the national prevalence of childhood diarrhoea was 12.9 percent, where the highest burden occurred in the North East (24.7 percent), poorest households (17.1 percent), and children whose mothers lacked education (16.4 percent). Maternal schooling, for instance, has a powerful effect on risk: one analysis of 2013 national survey data found that children of unschooled mothers had a diarrhoea rate of 15.5 percent and were 2.69 times more likely to have diarrhoea than children of better-schooled mothers (OR = 2.69; 95 % CI: 1.80–4.02) (NDHS, 2018).

Diarrhea is one of the main aggravations that affect children in the age group from zero to five years of age. This is because children are more susceptible to this and other diseases due to the immaturity in the immune system, especially reaching those with compromised nutritional status. In addition, diarrhea can be caused by several infectious agents, being influenced by determinants of biological, environmental, economic and socio-cultural orders Kamath et al. (2018).

Diarrhea diseases continue to present a significant threat to the well-being of children under the age of five in Africa, thereby contributing substantially to both morbidity and mortality rates. The period spanning between January 2020 and December 2024 has witnessed persistent challenges in the fight against these diseases, thereby necessitating a thorough investigation into the factors that determine their occurrence. It is important to note that the burden of diarrhea diseases is not evenly distributed across the continent, with residence, socioeconomic, and environmental factors playing pivotal roles in shaping the prevalence and incidence rates (Ayogu et al., 2019). In view of the above, the study examine Determinants of Childhood

Diarrhoea Management: A Socio-Economic Perspective among Mothers in Kwali Area Council, FCT, Abuja, Nigeria.

1.2 Statement of the Problem

Diarrhoea in children remains one of the leading preventable causes of illness and death in children aged under five years globally and kills nearly 424,000 children annually despite the existence of low-cost and effective interventions such as oral rehydration solutions (ORS) and zinc supplementation World Health Organization (WHO, 2024). In the sub-Saharan region, socio-economic disparities persist to not only affect the incidence but also the treatment of diarrheal diseases, with low-income children and poorly educated mothers disproportionately affected (Adugna et al., 2023). In Nigeria, the burden is of particular concern: an estimated 12.9% prevalence of diarrhoea in childhood was reported in the 2018 Nigeria Demographic and Health Survey, and the rates were found to be highest among those regions characterized by poverty, poor sanitation, and inadequate access to health care National Population Commission (NPC & ICF, 2019). Previous work has described non-optimal ORS and zinc utilization, non-uniform feeding habits, and delayed health-seeking behavior among mothers, especially in rural and peri-urban settings (Oloruntoba et al., 2022; Okoh & Ilesanmi, 2021). Nevertheless, little empirical evidence exists from the Kwali Area Council of the Federal Capital Territory, where socio-economic differences, varying levels of maternal education, and restricted access to public health interventions could enhance the possibility of suboptimal management practices. Further, studies related to these issues are mostly region specific, and are less focussed on associated risk factors using large scale data. Therefore, present study aims to show the determinant of diarrhoea disease among under 5 children across districts of Kwali using widely accepted nationally representative data and tries to find out the most responsible factors behind the occurrence of diarrhoea

among children. Diarrhoea disease among children has become crucial health concerns in Kwali area council. In spite of having different interventions and schemes to control, diarrhoea death among under five children in Kwali is still alarming. It is against this backdrop that this study examines Determinants of Childhood Diarrhoea Management: A Socio-Economic Perspective among Mothers in Kwali Area Council, FCT, Abuja, Nigeria.

2.0 Literature Review

2.1 Childhood Diarrhoea

World health organization defines diarrhoea as the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the individual (WHO, 2007). Worldwide, diarrhoeal diseases are reported as the leading cause of mortality among children aged five years and below (UNICEF, 2018). In some parts of the world, they account for higher mortality rates than all other causes combined (Petri et al., 2008; UNICEF, 2018). Childhood diarrhoea affecting children five years old and below accounts for approximately 63% of the global diarrhoea burden (Walker et al., 2012; Zhang et al., 2016), and is the second significant cause of infant mortality in developing nations (Platts-Mills et al., 2015; Kotloff, 2017) where poor sanitation and insufficient potable water supply are key factors (Chakravarty et al., 2017; Squire and Ryan, 2017). In Africa, Asia, and South America, diarrhoea accounts for one in eight deaths among children younger than 5 years per annum (Keddy et al., 2016; Kotloff, 2017) and an estimated 16% of child deaths in Nigeria annually (Charyeva et al., 2015). In Ogun State, South-West Nigeria, diarrhoea is one of the three diseases (the others being typhoid fever and cholera) which together are the second most prevalent water-related disease (Omole et al., 2015).

Childhood diarrhoea is an important public health concern, particularly in low- and middle-income countries where it is still a

leading cause of morbidity and mortality among children aged below five years. Diarrhoea is defined by the World Health Organization (WHO, 2024) as the passage of three or more liquid or loose stools within 24 hours that also results in dehydration, a condition that may be lethal if poorly controlled. This, based on UNICEF and WHO (2023), which estimates that 1.7 billion cases of diarrhoea in children occur annually throughout the world and result in about 443,000 deaths among children under five years old. Diarrhoea, though preventable and curable using cost-effective interventions like oral rehydration solution (ORS) and zinc supplementation, remains responsible for roughly 8% of all such deaths globally in children aged under five (WHO, 2024).

Child diarrhoea continues to be a significant health concern in Nigeria. The 2018 Nigeria Demographic and Health Survey (NPC & ICF, 2019) reported the national two-week prevalence rate as 12.9%, with rural and poor communities recording higher prevalence. Limited maternal education, low incomes of families, and restricted health care access are among the factors that increase prevalence rates of diarrhoea as well as ineffective management strategies (Oloruntoba et al., 2022). While there is international and government promotion of ORS and zinc supplementation, research has shown that the use is suboptimal; only 42% of the children with diarrhoea in Nigeria receive the recommended zinc treatment, and less than 50% receive ORS (Adugna et al., 2023).

2.1.2 Socio-Economic Determinants of Childhood Health

Childhood health is influenced heavily by a wide range of socio-economic determinants that condition living circumstances, resources access, and healthy development and growth opportunities for children. The World Health Organization (WHO, 2022) emphasizes that the social determinants of health are "the non-medical factors that affect health outcomes," i.e., the conditions in which people are

born, grow, live, work, and age. For children, these determinants are most crucial because experience in childhood has long-term consequences for physical, mental, and cognitive well-being. Empirical evidence has consistently shown that socio-economic position, as defined by variables including parental education, income, occupation, and family wealth, is an important determinant of health status during childhood (Marmot & Bell, 2019).

Among the most important predictors of outcomes for childhood health is maternal education. Mothers who are well educated will tend to adopt preventive health practices, make use of health services, and adopt advised child care practices such as immunization, appropriate nutrition, and proper treatment of frequent infant diseases such as diarrhoea (Victora et al., 2016). For example, a study in sub-Saharan Africa demonstrated that offspring of mothers who were secondary or higher educated had significantly lower rates of morbidity and mortality compared to children of non-educated mothers (Adekanmbi et al., 2017). This is mediated by higher health awareness, increased decision-making capability, and greater access to facilities.

Household wealth and income are also critical socio-economic determinants that affect child health. Households with more economic resources have better chances of affording healthy food, having access to clean water and sanitation, and getting prompt medical care when their children are ill (Rutstein & Staveteig, 2014). Poorer children are likely to be malnourished, have frequent infections, and have delayed health-seeking due to lack of money and other priority needs at home. In Nigeria, inequalities in child health and survival have also been directly linked to inequalities in wealth, with children from the poorest quintiles being disproportionately affected by preventable illnesses such as diarrhoea and pneumonia (NPC & ICF, 2019).

Parental occupation, especially maternal, also influences child health via the allocation of time to attend to the child and access information and services on health. Female workers in low-paying or informal work may have lower opportunities to attend health clinics and therefore cannot access child growth monitoring, immunization, and education on health (Fagbamigbe et al., 2021). Children whose families live in peri-urban or rural settings also face structural issues like inadequate road infrastructure, limited health facilities, and fewer trained doctors, which cumulatively impede the prompt treatment of childhood diseases (Okoh & Ilesanmi, 2021).

Community-level determinants also impact the health outcomes of childhood by creating enabling or constraining environments for healthy living. Factors such as access to improved WASH services; availability of maternal and child health facilities; and exposure to health promotion campaign messages all have a big contribution towards preventing and managing child illnesses (UNICEF, 2021). For instance, integrated interventions dealing with hygiene practices and early case management of diarrhea disease have been known to reduce child morbidity by a significant amount in low-resource settings (Walker et al., 2018).

2.1.3 Childhood Diarrhoea Management Practices among Mothers

Maternal management of childhood diarrhoea is a significant determinant of child survival and health, especially in low- and middle-income countries where formal health care is not accessible. The World Health Organization (WHO, 2024) recommends three key strategies of successful management: the use of low-osmolarity oral rehydration salts (ORS) for treating and preventing dehydration, the administration of zinc supplementation for 10–14 days to reduce the severity and duration of diarrhoea, and continued feeding, including

breastfeeding, to prevent malnutrition during and after an attack. In spite of the availability of these inexpensive measures, the global coverage is suboptimal and highly variable between and within countries (UNICEF & WHO, 2023).

Mothers are at the core of early detection and management of diarrhoeal attacks. They are guided by knowledge, socio-cultural beliefs, and exposure to health information. Studies have confirmed that well-informed mothers are likely to prepare and administer ORS correctly, maintain good feeding practices, and seek medical attention in time (Oloruntoba et al., 2022). There are still prevailing misconceptions e.g., withholding food and fluids during diarrhea within the majority of communities and lead to worsening dehydration as well as malnutrition (Adugna et al., 2023). Both cultural beliefs and reliance on herbal medicine also explain the latencies in the commencement of due treatment, particularly in rural and peri-urban settings (Okoh & Ilesanmi, 2021).

Dietary practices during diarrhoeal episodes are a key management aspect. Prolonged breastfeeding and increased fluid intake are crucial in an attempt to prevent dehydration and nutrient loss; however, there is evidence to suggest that carers tend to reduce or withdraw feeding during episodes due to cultural misconceptions or suspicion of worsening the condition (Fagbamigbe et al., 2021). Less than 50% of children who had diarrhoea received more fluids during illness, and less than 42% received zinc although it is recommended by WHO (NPC & ICF, 2019).

Health-seeking behaviour is another important element of the treatment for diarrhoea. Mothers usually decide whether to receive treatment at home or to seek formal health care based on factors such as the location of healthcare facilities, cost, past experience, and advice from relatives or members of the community (Rutstein & Staveteig, 2014). People who live in remote and low-income

communities are most likely to delay or forgo professional care owing to financial and transportation-related reasons, resulting in unnecessary complications (Walker et al., 2018). On the contrary, the better-educated mothers and those with a better socio-economic status have healthier health-seeking behavior and adhere more to advice (Adekanmbi et al., 2017).

In Nigeria, certain interventions have been implemented to increase maternal awareness and coverage of diarrhoea management, e.g., the Integrated Management of Childhood Illness (IMCI) strategy and mass media promotion of ORS and zinc supplementation. However, research indicates the presence of ongoing gaps: low awareness, low home-based treatment, and inadequate utilization of zinc supplementation continue to be significant impediments to improvement in the lowering of diarrhoea-related morbidity and mortality (UNICEF, 2021).

2.2 Empirical Review

A study by Mihrete et al. (2020) found that the work status of the mother and the number of under five children in the household were risk factors for child diarrhoea. Children of working mothers had higher odds to get diarrhoea as compared to children of non-working mothers also odds of diarrhoea decreased when the number of under five children in the household was two or less. Gebru et al. (2019) stated that children of non-educated mothers had higher odds of getting diarrhoea as compared to children whose mothers were literate. Moreover, children whose families practiced improper refuse disposal were more likely to get diarrhoea compared to children whose families practiced proper refuse disposal.

In study carried out by Mengistie, (2010), they found that there is a positive association between the type of drinking water source and diarrhoea where children in families that had an unprotected water source had increased odds of having diarrhoea as compared to

children in families that had a protected water source (Hussein, 2017). Amgusi, (2020) reported increased diarrhoea episodes among children who received polio 3 vaccinations compared to children who were not vaccinated.

Hussein (2017) discovered that the household source of drinking water was found to be positively associated with childhood diarrhoea. Under five children in households using protected sources including piped public taps, tube well, protected well, protected spring, and rainwater had less risk to experience diarrheal episodes. Whereas children in households using unimproved sources including unprotected well, unprotected spring, tanker truck, surface water and sachet water were 19% more prone to diarrheal episodes. This was in line with Mengistie, *et al.* (2021) where diarrhoea was significantly associated with domestic water supply from unimproved sources among children under five in eastern Ethiopia.

2.3 Theoretical Framework

2.3.1 Health Belief Model

The health belief model (HBM) was developed as an attempt to explain the decision of an individual with respect to preventive health care (French, 1992). This model was developed for the first time in the 1950's to evaluate why screening of tuberculosis was not successful in the USA (Hayden, 2009). Personal beliefs influence on a person's health choices and behaviour. Health Belief Model explains that health behaviour is determined by an individual's beliefs and perception about health problems and illness, and available resources address these problems (Calnan, 1984, champion and skinner, 2008). In this study, HBM will be applied to understand mother's behaviour and decision regarding management of childhood diarrhoea in Kwali Area Council of FCT, Abuja.

Health Belief Model mainly builds on the following four components which make theoretical constructs for the exploration of the

perception of mothers in this study. These components together assess the mother's understanding of risks and explain decisions of health behaviour (champion and skinner, 2008&Hayden, 2009).

1. Perceived Susceptibility: Perceived susceptibility refers to the belief about the livelihood of getting a disease or risk of being exposed to threat for a particular person in particular circumstances. This means how much risk a person perceives he/she has (Hayden, 2009). Recognizing a danger sign brings about the realization of needs for care. Women may be aware of the risk, but it does not guarantee that they will act for biomedical care. It is essential to see to what extent women see the risks how they confront the problems related to pregnancy and obstetric complications. The greater the risks are perceived as susceptible, the greater livelihood that they will seek for care (Hayden, 2009).

2. Perceived Threat/ Seriousness: If an individual does not see a health problem as risky or threatening. There is no stimulus to act. Perceived feeling about the seriousness of risk includes evaluation of both the medical consequences including pain, disability, death and social consequences such as impact on work, family and social relations (Hayden, 2009). Perceived threat explains a woman's belief about the seriousness, and how severe it can harm her. To make a decision on whether to seek medical care or not one must believe in both susceptibility and severity. So, health choices can be weighed. Pregnancy is a risk and there is a 10-15 percent chance of unexpected complications. (Van den Broek and falconer, 2011).

3. Perceived Benefits: A person's belief of giving importance to certain health actions decreases the risk of potential complication. A person tends to make a decision and adopt a healthy practice, when he/she believes that the decision taking would benefit them (champion and skinner 2008, Hayden, 2009). When a person perceives a threat, whether such perceptions lead to behavioural change will be affected

by the person's belief with respect to perceived benefits of the various measures available to reduce the threat (Hayden, 2009).

4. Perceived Barriers: These explain that decisions on health action are influenced by perceived barriers to change. When an individual evaluates an obstacle on his/her way of determining health behaviour, decision may not be made. Perceived barriers play a significant role in behavioural outcome (Hayden, 2009). Fear of pain and embarrassment are also common issues women perceived as barriers in seeking for health care (Mullany, 2006). Perception of women is different in diverse ethnic groups and so is mother's decision-making power within their house hold (Simkhada, et al, 2006 &Suwal, 2008).

METHODOLOGY

3.1 Research Design

This study adopted the survey research design, which enables the collection of data from a subset of the study population that accurately represents the larger group. The survey approach is particularly useful for identifying the relative incidence, distribution, and relationships between variables related to childhood diarrhea management among mothers in Kwali Area Council. To achieve this, the study utilizes both questionnaires and in-depth interviews (IDI) as qualitative research instruments.

3.2 Population, Sample Size and Sampling Techniques

Though the total population of Kwali Area Council is put at 85,837 from the National Population Commission projection (NPC, 2006). However, the target population for this study is not the entire population of Kwali Area Council, but the married women, both young and adult women, who are between 18 years and above from selected electoral wards which include Dafa, Gumbo, Kilankwa, Kwali, and Yangoji. According to information from the department of research, statistics and planning of the council area from the five electoral wards, the population of married women from the selected electoral

wards is 38,524 (Kwali Area Council Department of Research, Statistics and Planning, 2019). The choice of this category of persons (married women) was because they have children and know what it takes to manage the cases of diarrhoea on their children. In determining the sample size for this study, Yamane (1967) statistics technique was used to determine the sample size. Detail of Yamane (1967) statistics formula for calculating sample size. Thus, showing as:

$$n = \frac{N}{1+N(e)^2} \quad \frac{N}{1+N(e)^2}$$

Where:
N = Total Population
n = required sample size
e = margin error allowed (5%)
1 = Constant
Hence.
e = (0.05)2
N = 38,524

$$n = \frac{38,524}{1 + 38,525\ (0.0025)}$$

$$n = \frac{38,524}{38524\ (0.0025)}$$

$$n = \frac{38,524}{96.3125}$$

n = 399.98961713173 Apx: n = 400

The study utilized a multistage sampling technique to select respondents in Kwali Area Council. In the first stage, five electoral wards (Dafa, Gumbo, Kilankwa, Kwali Central, and Yangoji) were chosen using simple random sampling (lottery method). In the second stage, four main streets with high population density were randomly selected from each ward, yielding 36 streets. In the third stage, systematic sampling was applied to select 11 houses/compounds with married women aged 18 years and above from each street, resulting in approximately 400 participants. In the fourth stage, respondents

were randomly chosen from the selected households, including married individuals aged 18 years and above, who could also be household heads. For in-depth interviews, purposive sampling was used to select ten respondents (two from each ward), including community leaders, religious leaders, traditional rulers, women leaders, and health personnel, to provide insights aligned with the study objectives.

3.3 Method of Data Collection

The data for this study were generated through the quantitative method. The quantitative data involved the use of questionnaires, which were administered to all subjects in the areas sampled for the study to elicit information in line with the stated research objectives.

3.4 Method of Data Analysis

Data generated in the course of this study were collated, coded and analyzed using descriptive. First, the questionnaires were checked for completeness, accuracy of information and uniformity. The questionnaires were checked to see if there were errors and omissions, adequate information and legibility and relevant responses. Descriptive statistics analysis used simple frequency conversion of responses to percentages (i.e. the use of simple percentages method).

Analysis of the Findings

Table 1: Socio-Demographic Characteristics of Respondents (N=395)

Variables	Category	Frequency	Percentages
Age	18-25	120	30.4
	26-35	160	40.5
	36-45	85	21.5
	46 and above	30	7.6
Educations	No formal education	70	17.7

	Primary education	95	24.1
	Secondary education	150	38.0
	Tertiary education	80	20.3
Occupation	Housewife	110	27.8
	Trader	140	35.4
	Civil-servant	75	19.0
	Farmer	70	17.7
Monthly income	20,000	170	43.0
	21,000-50,000	150	38.0
	51,000-100,0000	55	13.9
	101000-and above	20	5.1
Total		395	100.0%

Source: Field Work, 2025

In terms of age distribution**,** the majority of respondents were between 26–35 years (40.5%), followed by those aged 18–25 years (30.4%). Respondents aged 36–45 years accounted for 21.5%, while only 7.6% were aged 46 years and above. This indicates that most of the mothers are within their active reproductive and childcare years.

Regarding educational attainment**,** 38.0% of the respondents had secondary education, 24.1% had primary education, and 20.3% attained tertiary education, while 17.7% had no formal education. This reflects a moderate level of educational exposure among mothers, with a considerable proportion having at least some level of formal education, which is important for health literacy and proper child health management.

For occupation**,** the majority were traders (35.4%), followed by housewives (27.8%), civil servants (19.0%), and farmers (17.7%). This suggests that most mothers are engaged in informal economic

activities or unpaid domestic roles, which may influence their financial capacity and access to health resources.

In terms of monthly income**,** a significant proportion (43.0%) reported earning ₦20,000 or below, 38.0% earned between ₦21,000–₦50,000, 13.9% earned ₦51,000–₦100,000, while only 5.1% earned ₦101,000 and above. This income pattern reveals a predominantly low-income population, which may have implications for the affordability and accessibility of diarrhoea management practices and health services.

Analysis of Study Objectives

Table 2: Prevalence and management practices of childhood diarrhoea among mothers in Kwali Area Council

Management practice	**Frequency (n)**	**Percentage (%)**
Use of oral rehydration solution	180	45.6
Herbal remedies	96	24.3
Increased breastfeeding/feeding	70	17.7
Self-prescribe antibiotics	30	7.6
No treatment	19	4.8
Total	**395**	**100.0**

Source: Field Work, 2025

Table 2: indicate that a majority of mothers (45.6%) used ORS for the management of childhood diarrhoea, which aligns with WHO recommendations. However, about one-quarter (24.3%) relied on herbal remedies, while 7.6% used antibiotics without prescription, potentially contributing to antimicrobial resistance. A notable 4.8%

did not provide any treatment, reflecting gaps in awareness and access to effective care.

Table 2: Cross-Tabulation of Socio-Economic Characteristics and Management of Childhood Diarrhoea.

Socio-Economic Factor	**Category**	**Major Management Practice Adopted**
Educational level	No formal education (64)	High reliance on herbal remedies (41%)
	Secondary & above (21)	High use of ORS (52%)
	₦20,000 (105)	Herbal remedies and delayed treatment (37%)
Monthly income	₦40,000 (148)	ORS and prompt health facility visits (61%)
Total	**395**	**100.0**

Source: Field Work, 2025

Education and income were strongly linked to appropriate management of childhood diarrhoea. Mothers with higher education and better income levels were more likely to use ORS and seek professional care, while those with low income and no formal education often resorted to traditional methods.

Table 3: Challenges Mothers Encounter in the Management of Childhood Diarrhoea

Challenges	**Frequency (n)**	**Percentages (%)**
Lack of funds for proper treatment	155	39.2
Inadequate access to health facilities	110	27.8
Cultural beliefs/traditional influence	78	19.7
Lack of awareness about ORS/home remedies	52	13.2
Total	**395**	**100.0**

Sources: Field Work, 2025

Table 3: show that the main challenge reported was lack of funds (39.2%), followed by poor access to health facilities (27.8%). Cultural influences also played a significant role (19.7%), indicating the need for health education and improved accessibility.

Table 4: Pathways Mothers Adopt in the Management of Childhood Diarrhoea

Pathways chosen	**Frequency (n)**	**Percentages (%)**
Public health facilities	142	36.0
Private clinics/pharmacies	110	27.8
Traditional healers/home remedy	98	24.8
Community health worker	45	11.4
Total	**395**	**100.0**

Sources: Field Work, 2025

Table 4: show that Public health facilities were the most utilized pathway (36%), followed by private clinics (27.8%). However, nearly a quarter (24.8%) still relied on traditional healers or home remedies, indicating the persistence of non-formal treatment methods.

4.2 Discussion of Findings

The findings of this study provide significant evidence on the practice and treatment of childhood diarrhoea among Kwali Area Council mothers. The outcome is that oral rehydration solution (ORS) remains the most favored practice, with 45.6% of the mothers practicing it (Table 2). This outcome concurs with the World Health Organization (WHO) recommendation of ORS as a first-line treatment for childhood

diarrhoea, which has been demonstrated to reduce morbidity and mortality substantially (WHO, 2017). However, the high reliance on herbal remedies (24.3%) and self-medication with antibiotics (7.6%) also suggests a long-term lack of adequate healthcare-seeking behavior, potentially placing children at risk for unsafe practice and transmission of antimicrobial resistance, as suggested by Oloruntoba et al. (2018).

The socio-economic profile and diarrhoea care practices cross-tabulation (Table 2) also shows educational level and household income's influence on health decisions. The less educated mothers and those with lower monthly earnings depended mostly on herbal treatment and delayed health facility visits (41% and 37%, respectively), whereas the secondary and higher-educated mothers and better-income earners (₦40,000 and more) used more of the ORS and had earlier visits to health facilities (52% and 61%, respectively). This agrees with findings by Adeyemi et al. (2019), where they mentioned that maternal education contributes to enhancing knowledge in respect to effective diarrhoea management practices as well as the timely use of institutional care.

Issues raised by mothers in diarrhoea management among children (Table 3) are lack of money (39.2%), poor access to health facilities (27.8%), culture (19.7%), and insufficient awareness (13.2%). They

explain structural and systemic barriers to successful diarrhoea control, consistent with UNICEF's (2020) observation that socioeconomic and cultural determinants significantly hinder diarrhoea prevention and treatment in peri-urban and rural Nigerian communities. The widespread influence of cultural belief underlines the need for context-appropriate health education campaigns to counter misconceptions about causation and treatment of diarrhoea.

For healthcare-seeking pathways (Table 4), most used were public health centers (36%), followed by private clinics and drugstores (27.8%). Still, nearly a quarter (24.8%) utilized traditional healers and home treatments, and a smaller proportion (11.4%) used the services of community health workers. This is typical of the co-existence of formal and informal health systems, and as noted by Iwu et al. (2021), accentuates the need for complementary integration of community-based health interventions with formal health systems to strengthen early case detection and management of diarrhoea.

5.1 Conclusion

This study examined the determinants of childhood diarrhoea management among mothers in Kwali Area Council, FCT, Abuja. The findings revealed that maternal age, education, and income significantly influenced the choice and effectiveness of diarrhoea management practices. Mothers with higher education and better

income levels demonstrated improved knowledge and adoption of appropriate management methods, while younger and less educated mothers faced greater challenges in accessing effective care. These results underscore the importance of enhancing maternal socio-economic status and health education as crucial strategies for improving childhood diarrhoea management and reducing its prevalence in the study area.

5.2 Recommendations

i. Government and non-governmental organizations should strengthen healthcare infrastructure and ensure the availability of affordable diarrhoea management services, including oral rehydration therapy (ORT), zinc supplementation, and prompt medical consultation for children.

ii. Targeted health education campaigns should be intensified to improve mothers' knowledge and awareness about childhood diarrhoea prevention, early detection, and proper management techniques.

iii. Policies and programs aimed at improving women’s income levels through skill acquisition, microfinance schemes, and entrepreneurship support should be implemented.

iv. Community health workers should be trained and mobilized to provide household-level interventions, monitor diarrhoeal cases, and offer immediate guidance to mothers, especially in rural and underserved communities.

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